



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,118	01/31/2001	Peter M. Maddocks	10004943-1	5383

7590 04/10/2006

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

KANG, INSUN

ART UNIT PAPER NUMBER

2193

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/773,118

Applicant(s)

MADDOCKS ET AL.

Examiner

Insun Kang

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 5-15, 19-22, 34, 35, 39, 41, 42, 44 and 46-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-15, 19-22, 34, 35, 39, 41, 42, 44, and 46-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This action is in response to the amendment filed 1/17/2006.
2. As per applicant's request, claims 3, 4, 16-18, 43, and 45 have been cancelled, claims 1, 5, 6 8-12, 14, 21, 34, 39, 41, 42, and 46-52 have been amended and claims 53-56 have been added. Claims 1, 2, 5-15, 19-22, 34, 35, 39, 41, 42, 44, and 46-56 are pending in the application.

### **Claim Rejections - 35 USC § 101**

3. The rejection to claims 46-52 has been withdrawn due to the amendment to the claims.

### **Claim Rejections - 35 USC § 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-22, 39, and 41-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Blowers et al. hereinafter referred to as "Blowers."

As per claim 1:

Blowers discloses:

Art Unit: 2193

- a graphical user interface (GUI) comprising: logic configured to execute GUI generation code and GUI user interaction handling code; and a display device in communication with said logic (i.e. "Graphical representations of possible hardware and possible machine vision tasks are displayed. Commands are received from a user to select desired hardware operating parameters corresponding to desired hardware and a machine vision graphical representation and its associated first control program corresponding to a desired machine vision task," abstract)

-wherein execution of the GUI generation code by said logic causes a first window and a second window to be displayed on the display device, said first window presenting a first panel configured to present plural devices and associated commands of a sequence as a hierarchical tree structure, each of the devices in the sequence being at a different hierarchical level than a hierarchical level of one or more commands associated with the device (i.e. developing a graphical, control-flow structure such as a tree structure...further includes the step of displaying graphical representations of possible hardware and possible machine vision tasks...receiving commands from a user to select desired hardware operating parameters corresponding to desired hardware and a machine vision graphical representation and its associated first control program corresponding to a desired machine vision task. The method includes displaying the structure. The selected machine vision graphical representation is a node. The first control program is linked into the structure," col. 3 lines 15-21; 25-35), the first window presenting a second panel configured to present one or more available commands and devices for adding commands and devices to the sequence, and said

second window presenting results of execution of the sequence (i.e. "The task sequence generation window illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60) as claimed.

As per claim 2, the rejection of claim 1 is incorporated. Blowers further discloses that said first and second panels are simultaneously and fully viewable by a user (i.e. col. 9 lines 1-6) as claimed.

As per claim 5, the rejection of claim 1 is incorporated. Blowers further discloses: each of the commands comprises an argument (i.e. col. 9 lines 1-6; "The task sequence generation window illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60) as claimed.

As per claim 6, the rejection of claim 1 is incorporated. Blowers further discloses that said presented results include a start time and an end time associated with execution of each command (i.e. col. 9 lines 16-25) as claimed.

As per claim 7, the rejection of claim 1 is incorporated. Blowers further discloses that said presented results include information defining an iteration associated with a displayed command (i.e. col. 9 lines 16-25) as claimed.

As per claim 8, the rejection of claim 1 is incorporated. Blowers further discloses that said presented results include a step associated with a displayed command (i.e. col. 9 lines 7-25) as claimed.

As per claim 9, the rejection of claim 1 is incorporated. Blowers further discloses that said presented results include a device associated with a displayed command (i.e. col. 9 lines 7-25) as claimed.

As per claim 10, the rejection of claim 1 is incorporated. Blowers further discloses that presented results include information indicating whether or not the displayed command was successfully executed (i.e. col. 9 lines 7-25) as claimed.

As per claim 11, the rejection of claim 1 is incorporated. Blowers further discloses that said second window displays a unique iteration number identifier for each of said one or more iterations of the sequence, each said iteration number identifiers uniquely identifying a particular iteration of said sequence, and wherein when a user selects one of said unique iteration number identifiers, information describing each command executed during the iteration associated with the selected iteration number identifier is displayed on said display device (i.e. col. 9 lines 7-25) as claimed.

As per claim 12, the rejection of claim 11 is incorporated. Blowers further discloses: a start time and an end time associated with execution of each command that was executed during the iteration associated with the selected iteration number identifier; information identifying the iteration associated with the each command ; a step associated with each command; a device associated with each command; information indicating whether the displayed command was successfully executed (i.e. col. 9 lines 7-25) as claimed.

As per claim 13, the rejection of claim 1 is incorporated. Blowers further discloses that the GUI generation code and the GUI user interaction handling code are written in an object-oriented, platform-independent language (i.e. col. 6 lines 15-22) as claimed.

As per claims 14-15, 19-22, they are the method versions of claims 1, 2, 5-10, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1, 2, 5-10 above.

Per claim 39:

The rejection of claim 1 is incorporated. Blowers further discloses:

Execution of the sequence of commands causes communication with the devices identified by the sequence (i.e. col. 9 lines 7-25) as claimed.

Per claim 41:

The rejection of claim 1 is incorporated. Blowers further discloses:

A memory to store a file containing the results of the execution of the sequence, wherein the second window presents the results of the execution of the sequence in response to selection of a displayed option that enables opening of the file (i.e. col. 9 lines 7-25) as claimed.

Per claim 42:

The rejection of claim 1 is incorporated. Blowers further discloses:

-the execution of sequence causes testing of the devices identified in the sequence argument (i.e. col. 9 lines 1-6; "The task sequence generation window illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60) as claimed.

Per claim 44:

The rejection of claim 14 is incorporated. Blowers further discloses:

-storing the results of execution of sequence in a file, and in response to receiving user activation of a displayed option, open the file to enable displaying the results in the

Art Unit: 2193

second window argument (i.e. col. 9 lines 1-6; "The task sequence generation window illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60; col 9 lines 1-7) as claimed.

As per claims 46, 47, and 49-52, these are the computer program versions of claims 5-11 and 42, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 5-11 and 42 above.

Per claim 48:

The rejection of claim 46 is incorporated. Blowers further discloses:

The program when executed causes the computer to remove at least one of a step, device, and command from the sequence in response to selection of a displayed third option (see Fig 7-9, edit option) as claimed.

Per claim 53:

The rejection of claim 1 is incorporated. Blowers further discloses:

wherein the first panel is configured to further present

at least a step of the sequence, the step including at least one of the devices and the one or more

commands associated with the at least one device, wherein the step is at a hierarchical level that

is different from the at least one device.

Per claim 54:

The rejection of claim 14 is incorporated. Blowers further discloses:



Art Unit: 2193

displaying the sequence comprises displaying the sequence as a hierarchical tree structure, each of the devices in the sequence being at a different hierarchical level of the hierarchical tree structure than a hierarchical level of one or more commands associated with the device (i.e. col. 9 lines 1-6; "The task sequence generation window illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60; col 9 lines 1-7) as claimed.

Per claim 55:

The rejection of claim 14 is incorporated. Blowers further discloses:

wherein the sequence further comprises at least one step that includes at least one device and one or more commands associated with the at least one device, and wherein displaying the sequence comprises displaying the sequence as a hierarchical tree structure, the at least one step, the at least one device, and the associated one or more commands being at different hierarchical levels in the tree structure (i.e. col. 9 lines 1-6; "The task sequence generation window illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60; col 9 lines 1-7) as claimed.

Per claim 56:

The rejection of claim 46 is incorporated. Blowers further discloses:

wherein the sequence is displayed as a hierarchical tree structure containing the steps, devices, and commands, each step at a hierarchical level different from the respective hierarchical levels of the devices and commands included in the corresponding step (i.e.

col. 9 lines 1-6; "The task sequence generation window illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60; col. 9 lines 1-7) as claimed.

### **Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blowers et al. (US Patent 6,724,409) hereinafter referred to as "Blowers," in view of Weinberg et al. (US Patent 6,587,969) hereinafter referred to as "Weinberg."

Per claim 34:

Blowers discloses:

-a processor configured to execute logic configured to generate a graphical user interface (GUI), logic configured to interact with at least one human to machine interface, and logic configured to generate commands applied to control systems within one or more remote devices (i.e. "Graphical representations of possible hardware and possible machine vision tasks are displayed. Commands are received from a user to select

desired hardware operating parameters corresponding to desired hardware and a machine vision graphical representation and its associated first control program corresponding to a desired machine vision task,” abstract)

-a display device in communication with said processor, wherein when said processor executes the logic configured to generate the GUI, a first window is displayed on the display device that displays both a sequence in a first portion of the first window and a list of one or more commands in a second portion of the first window, the displayed sequence being in a hierarchical tree structure in which plural devices and associated commands are at different hierarchical levels (i.e. “developing a graphical, control-flow structure such as a tree structure... further includes the step of displaying graphical representations of possible hardware and possible machine vision tasks...receiving commands from a user to select desired hardware operating parameters corresponding to desired hardware and a machine vision graphical representation and its associated first control program corresponding to a desired machine vision task. The method includes displaying the structure. The selected machine vision graphical representation is a node. The first control program is linked into the structure,” col. 3 lines 15-21; 25-35) wherein said first window presents an option, the selection of which executes the sequence (i.e. “The task sequence generation window illustrated in Figs 7-9” and results window of Fig. 9 through a results interface 60).

Blowers discloses when a second option is selected, the display device displays a second window displaying data regarding execution of the sequence, (i.e. “The task

Art Unit: 2193

sequence generation window illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60). Blower does not explicitly disclose that the data regarding the execution of the sequence is a summary of information. However, Weinberg teaches that it was known in the art of software development and testing, at the time applicant's invention was made, to view the overall execution results without details. It would have been obvious for one having ordinary skill in the art of computer software development and distribution to modify the tree-based GUI testing system of Blowers to include summary information of the execution. The modification would be obvious because one having ordinary skill in the art would be motivated to view the overall information resulting from the execution as taught by Weinberg (See the displayed Execution Log window in Fig 3A, 4A, and 5F; "FIG. 5F illustrates the execution summary that is provided in a web-based implementation of the testing tool. The execution summary includes a tree representation ... or "report tree" of the test execution in the left pane of the screen," col 17, lines 1-45; see also col 3, lines 11-44; col 11 lines 33-50).

Per claim 35:

The rejection of claim 34 is incorporated. Blowers further teaches that the one or more remote devices comprise devices configured to house and manipulate data storage media (i.e. col. 7 lines 9-25) as claimed.

### ***Response to Arguments***

8. Applicant's arguments filed 1/17/2006 have been fully considered but they are not persuasive.

Per claims 1, 14, and 46::

The Applicant states that:

Blowers do not disclose a sequence as a hierarchical tree structure, where the sequence includes devices and associated commands, and each of the devices in the sequence is at a different hierarchical level than a hierarchical level of the one or more commands associated with the device...In Blowers, only one product folder can be presented at a time.

In response, as addressed above, Blowers discloses the tree hierarchy structure including a control sequence having at least one node providing a set of control programs, representing possible machine vision tasks and displaying graphical representations of desired hardware and its associated control program corresponding to a desired machine vision task. (i.e. "developing a graphical, control-flow structure such as a tree structure...further includes the step of displaying graphical representations of possible hardware and possible machine vision tasks...receiving commands from a user to select desired hardware operating parameters corresponding to desired hardware and a machine vision graphical representation and its associated first control program corresponding to a desired machine vision task. The method includes displaying the structure. The selected machine vision graphical representation is a node. The first control program is linked into the structure," col. 3 lines 15-21; 25-35). The product folder in Fig 6 is presented by being selected from the tool boxes of Fig 5 which correspond to desired functional tasks and are linked into the tree structure of FIG. 6 by a task sequencer interface (col. 8 lines 61-67).

Per claim 34:

The applicant states that Blowers and Weinberg does not disclose the limitations of claim 34, for the reasons set forth in connection with claim 1. As shown above, the rejection of claim 1 by Blowers was maintained, and accordingly, the rejection of claim 34 is also maintained.

Per claims 53-56:

The applicant states that claims 53-56 are allowable as being dependent on the allowable base claims. As shown above, the rejections of the independent claims 1, 14, 34, and 46 are maintained, the argument that claims 53-56 are allowable as being dependent on the allowable base claims is considered moot.

### ***Conclusion***

**9. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Insun Kang whose telephone number is 571-272-3724. The examiner can normally be reached on M-F 7:30-4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on 571-272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

I. Kang  
AU 2193



**KAKALI CHAKI**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**